

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/JP03/11654

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> C22B1/16, 1/00, 7/02, 19/30, 19/34, 13/02, B09B3/00,  
C02F11/00,

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> C22B1/00-61/00, B09B3/00, C02F11/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2003
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2002-194452 A (Aichi Steel Works Ltd.), 10 July, 2002 (10.07.02),	1-6, 8, 9, 13, 15-17
Y	Examples (Family: none)	7, 10, 18-25
Y	JP 53-29122 B2 (Toho Aen Kabushiki Kaisha), 18 August, 1978 (18.08.78), Full text (Family: none)	7, 10, 18-25
A	JP 2001-294942 A (Nippon Steel Corp., Nittetsu Plant Designing Corp.), 26 October, 2001 (26.10.01), (Family: none)	1-25

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:

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considered to be of particular relevance

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priority date and not in conflict with the application but cited to  
understand the principle or theory underlying the invention  
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considered novel or cannot be considered to involve an inventive  
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"&"

Date of the actual completion of the international search  
27 November, 2003 (27.11.03)

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International Publication No.

PCT/JP03/11654

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 10-265861 A (Sumitomo Metal Mining Co., Ltd.), 06 October, 1998 (06.10.98), (Family: none)	1-25
A	JP 55-104434 A (Dowa Mining Co., Ltd.), 09 August, 1980 (09.08.80), (Family: none)	1-25

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